





LUCID's Land Use Change Analysis as an Approach for Investigating Biodiversity Loss and Land Degradation Project

Policies, People and Land Use Change in Uganda A Case Study in Ntungamo, Lake Mburo and Sango Bay Sites

LUCID Working Paper Series Number: 17

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September 2002



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ACRONYMS

AC : Associate Consultant
CBO : Community Based Organisation
FGD : Focus Group Discussion
KI : Key Informant
LC : Local Councils
MIS : Management Information Systems

MISR : Makerere Institute of Social Research
NGO : Non-Governmental Organisation
PLA : Participatory Learning and Action

RA : Research Assistant (s)

TL : Team Leader

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EXECUTIVE SUMMARY

The research focused on a set of intermediate variables through which demographic changes can alter the natural environment. These variables are especially important because they include the main physical and social properties that define the relationship between farmers and their land. Size holdings, fragmentation (dispersion), and fragility are among the more obvious physical attributes that differentiate one farmer's holdings from another's. It is clear, increasing demographic pressure and the resulting competition for scarce resources promotes restructuring of the physical and social attributes of landholding. In return, these changes can damage soil productivity. Socio-economic changes at the community level induce responses in the land management both at household and community levels. At community levels. responses may take forms of land use change, migration, and land investment/intensive management. Population growth, particularly in resources scarce environments, can lead to changes in the structure of landholding (size of holdings, fragmentation/dispersion, fragility, tenure etc). It is the result of adaptation that trigger environmental and social stress often culminating in conflicts. Policies influence this process of change at various levels; by affecting pressure factors; by directly affecting community condition e.g. restriction on resource use; by intervening in local markets e.g. land-titling programs. The traditional perspectives on population and agricultural intensification, such as those developed by Malthus and Boserup are incomplete at best. They fail to fully incorporate the intermediate linkages both to and from the changing structure of landholding.

Land policy, land rights and land reform are important ingredients in the poverty reduction process in both rural and urban areas of the developing world. Several Land issues are often complex and politically contentious, and for these reasons have been unresolved. This however, makes land issues, - poverty issues, political environmental issues and above all national issues. This report aims at highlighting the impacts of salient land polices in Uganda and the factors behind the land impasse and the importance of a clear land policy in national development and integration. The trend maintained is that, land is across-cutting issue in poverty reduction while sustainable development and user rights of land are a kin to two ears of the same corn.

A. INTRODUCTION

A.1 Introduction

This study focused on the various policies that have influenced land use change in Uganda. Several polices have influenced land development and utilisation patterns in several parts of Uganda. The investigation focused at various interest groups and stakeholder views and perceptions towards the performance and evolution of land policies but more specifically toward the framing an effective land use policy for Uganda. The report is divided into seven chapters. Chapter one presents the introduction, which outlines the objectives and methods used for executing the study. Chapter two presents the policy regimes that have influenced land use patterns. This constitutes both the policy content and direction. Chapter three presents the impact on land tenure and utilisation. Chapter four presents a discussion of population change on land sue patterns while chapter five presents the root causes of land use change. The change is presented as a culmination of the land tenure problem. Chapter six presents the variations in response to various land tenure regimes and the report ends with conclusions and recommendations.

A.2 Background

Land is a fundamental factor of production and is indeed Uganda's prime and critical asset in development. With a landmass of 197,096 Sq. Km and a population of approximately 21 million (MoFPED 2000), Uganda would relatively not have a land problem only that it is the land policy and management Regime¹ associated with land degradation that appear to have created an artificial shortage of land. Population statistics show a density range of 12 persons per Sq. Km in Moroto District-a remote rural district-North Eastern Uganda to 4.112 persons per Sq. Km in Kampala City (Ministry of Finance and Economic Planning 1998). Further, individual land accessibility is determined by many other factors including the tenure system, the land market and management regimes. However, in order to understand the impact of land policy and management regime on land use change, it is important to analyse the land problem in Uganda since the colonial period 1898-1962. This is because the colonial administration created serious contradictions in land tenure and management that form the epicentre of any discussion of land issues in Uganda. Land is Uganda's precious natural heritage and as a result favourable climate and fertile soils, both of which have contributed to make it suitable for several land use types e.g. agriculture, forestry and pasturelands. Agriculture is ranked high on national agenda. However, the encumbrances in land tenure and management have condemned several land use types especially agriculture to a dominant subsistence level.

The concept of policy is complex and without a specific delineated definition. Policies seem to imply generally a set of goals and underlying actions for attaining the stated goals. Sapru (1994: 3) defines policy as:

"Guidance for action and takes a form of declaration of goals and objectives, societal values and courses of action."

The major elements of a policy is the relationship among inputs, outputs, policy outcomes and measurable indicators. Anderson, (1975) defines policy as a purposive course of action determined by actors and directed at solving a problem.

Land tenure is the mode of landholding, together with the terms and conditions of occupancy. It is about the "bundle of rights" held and enjoyed in the land resource. The bundle of rights are relative in terms of the degree of their enjoyment, and they translate into the manner of use of land, the duration of use or occupancy, as well as relocation of the rights (transfer, lease, sublease, licensing, bequeath, etc.). Tenure is characterized by a multiplicity of influences: legal; socio-cultural; ecological/climatic; socio-economic; the formal, semi-

¹ This refers to systems of land administration that determine the rights of holding land rights, the adjudication process of land matters and the organization of the land market. There are different land management regimes with different consequences to the urban poor.

informal and informal institutional arrangements, etc. The essence of a tenure system are the ways in which the rights, restrictions and responsibilities that people have with respect to the land (and property) are held.

Natural resource management constitute systems concerned with property rights covering their conceptual meaning, operational aspects and enforcement. Resource tenure refers to the terms of holding and use of such resources. It constitutes the manner in which resource use rights are distributed and controlled. This covers the whole range of permissible activities that can be engaged in natural resources by the holder and the whole range of transactions between the resource holder and persons in respect of the resource. It defined the rights one has over the use of the natural resources in relation to the community. Rights do not represent relationships between a person and an object; rather they are relationships between the holder and the others in respect to that object. It will be recalled that land tenure will be greatly influenced by natural resource tenure systems. Land utilization relates closely to the different tenure systems. This is because the interests and rights of the parties involved impact greatly on the activities that the occupants and/or owners can undertake on the land.

The Ugandan Constitution (1995) defines the current land tenure system to comprise four (4) systems of land tenure in Uganda. These include:

- Freehold
- Leasehold
- Mailo
- Customary.

It will be demonstrated in later chapters how the land tenure system affects land use change.

A.3. Objectives of the study

- To satisfactorily document and review the previous salient policies that has had an impact on changes in land utilisation.
- Provide a critical assessment of the legislative framework, various tenure systems and their impact on land use.
- Analyse the various perceptions of land use changes among communities and the various responses as well as challenges encountered at household level.
- Analyse the content and direction of various policy frameworks whose output has shaped land utilisation. These include inter alia;
- Assess the efficacy of various policies and make recommendations for effective land use.

The major proposition is that Uganda being predominately an Agricultural country and the main stay of household welfare being derived on the farm, the way land is accessed and utilized are critical in shaping the interventions aimed at improving household welfare. This echoes the interventions of Uganda's Macro-economic frameworks namely Poverty Eradication Action Plan (PEAP) and Programme for Modernisation of Agriculture (PMA). Therefore, one way to bolster land productivity is to streamline land use. The bone of contention is on what exact changes should be made in land use policy that would generate effective land utilisation. In addition, often, the side taken by the protagonists depends on how favourable the changes are to one's side. The perceived real out put should be a 'win-win' situation, although this sounds an idealistic view it is realistic to minimize constraints and maximize benefits to each of the land users (today and the future generation) including the environment. Our ultimate aim is to reduce the number of economic, social and environmental causalities at least to the best of the tools and resources at our disposal while maximising the out puts from our most single resource-land. This is where the issues of national consensus, political astuteness and pragmatism come in the promulgation of effective land use policies. It must emerge that the proposed changes will go a long way to meet national

aspirations. However, it would be desirable to incorporate new provisions for all mankind including women-the major actors on the land and other vulnerable people to access land as a means of poverty alleviation. The analysis and review of the various land regimes and policies will provide confidence and opportunity for the marginalized and the well to do, as well as a bulwark of 'protecting the poor against exclusion from land resources. In addition, a basis and platform for integrating the environmental issues in policy development will be strengthened.

A.4 Technical methodology and approach

In this section, the methods that were used in order to accomplish the objectives of the project are discussed. Specifically, this section addresses the approaches, techniques and procedures, which were adopted for data collection, coding and analysis. The methodology was based on the overall objectives of the project and scope of the study.

- 1. Prior thorough consultations were made amongst the Research Team to enhance team building. This process was facilitated by the internalisation of the study objectives and familiarisation with the study concepts, variables and areas. The study adopted a *triangulated approach* to garner data on a spectrum of variables related to land policies and land use changes in Uganda. Pertinent Literature provided by stakeholders and secondary information sources were duly reviewed and analysed. It is from the thematic content analysis of this information that the relevant research issues were synthesised.
- 2. Secondly, the quantitative information that has been collected was processed and analysed. The quantitative data was reinforced with qualitative information regarding specific policy changes and how they have impacted n land use change in the study area.
- 3. Key informant interviews were conduced to systematically disentangle data regarding the objectives, direction and achievements of specific policy outcomes.

The study adopted a multi-faceted research design in order to garner data on a spectrum of variables related to land use policies. Both qualitative and quantitative approaches were used. In order to undertake the assignment, the researchers began with a review of land policies from the pre-colonial period up to the present. This enabled the researchers to acquaint themselves with the impact of various policies on land use change.

The study was conducted in the three purposively selected areas in Uganda to mimic a transect from high moist deeply dissected landscape, through a low moisture undulating grasslands to dry grasslands. These were as follows:

- Sango Bay-Rakai district
- Lake Mburo Mbarara district
- Rubale-Ntungamo district.

These areas represents the epicentres of land issues in Uganda both in tenure and bio-diversity degradation. The various land encumbrances have been rife. The transformation from Common Property Regime (CPR) has also been a contentious issue that has caused significant changes in land use. Ntungamo borders are of Uganda's scenic biodiversity hot spots steep and moisture landscapes of Kabale district in Southwest Uganda, well endowed with rich pastureland savannah toward the north while in the southern areas, it is well endowed with alluvial soils that support cultivation. The areas of Sango Bay and Lake Mburo are in the western cattle corridor with savannah grasslands suitable for cattle rearing. The areas experience dry spells and sporadic seasonal flooding that are worsened by overgrazing and overstocking. The water sources are scarce. The water sources that are available is Lake Mburo itself which is in the National Park itself; hence a restricted area. It is in the search for water that the pastoralists find pretext to encroach on the National Park area, a scenario that is amply discussed in the proceeding sections of this report. The various transformations in these areas have illustrated the relationship between land ownership, accessibility and

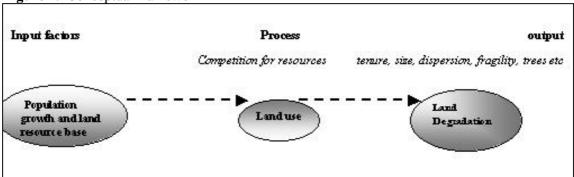
utilisation. This is what we have called poverty as a culmination of the human-environment interface. The table below shows the nature of respondents by category. The purpose of this paper is to get a broad picture with regional perspectives regarding the impact of the various land use policies in Uganda over time.

The pre-test of research instruments was done to ensure the validity of the instruments developed. The pre-test exercise constituted the testing of the research tools to ensure the following:

- That the instruments developed portray the relevant content and covers all issues under investigation
- That the wording of the questions in the instruments is meaningful and clear, precise and understandable by the respondents
- That the questions were constructed in an orderly format. This element ensures that the question follow a logical flow.

The study was conceptualised using the following variables aligned along input, process and output relationships.

Figure 1. Conceptual framework



The model provides the framework of considering the relationships that help us understand the critical paths of influence between population pressure and land degradation.

B. POLICY REGIMES THAT HAVE INFLUENCED LAND USE PATTERNS B.1. Historical Perspective

Land Tenure And Management Regimes In Uganda: The Pre-Colonial Arrangement
During the pre-Colonial period i.e. before 1894, land tenure and management were invariably
customary. Documentary titles as evidence of ownership were virtually unheard of. While
there were a few variations from one ethnic group to the other (Kisamba; 1992), there was
little difference in the broad principle that access rights were held by the occupants, through
lineage and inheritance. The proof of ownership was by pedigree. As for the communal land,
it was understood that this was for the use of the whole community. The above principle was
strictly observed and indeed, conflicts were very rare if at all (Ibid). This specifically referred
to common benefits such as grazing and pasture land. However, this should be understood in
the context that at the time, the population was relatively small-about one-third of today's-and
therefore there was much less pressure on the land resource. Similarly, households were just
pre-occupied with subsistence production and therefore land titles were largely irrelevant. It
has been documented that the main method of accessing land was via inheritance (Nsibambi
1997). However, on a lesser scale, access to land could also be gained for unclaimed "public"
land with approval from the head or the members of the respective ethnic group. Indeed, the

almost exclusively inheritance method led to serious fragmentation² especially in the land pressure areas like Kigezi in South-western Uganda. This customary system, which had persisted especially in the rural areas, was characterized by lack of tenure security, poor occupants and little development. The community/Ethnic groups just like the poor individual peasants lacked the incentives and initiatives to invest in and develop the land.

The Colonial Era

Towards the turn of the nineteenth century, Uganda was declared a British Protectorate. The subsequent events were to fundamentally change the configuration of land tenure and management in Uganda. The resultant ramifications are still manifest up to the present. The Buganda, Toro and Ankole agreements entered into between the protectorate government and the respective Kingdoms paved the way for increased individualization of land ownership. The protectorate policy was not only to ensure self-sustenance but also to promote private initiative. The colonial states were viewed as sources of raw materials for industrial production as well as markets. The case of Uganda and its famous long staple cotton fits well in the textile industries of Lancashire and the emphasis on tobacco growing serves to explain the growth and prosperity of British American Tobacco-BAT. The colonialists as well required individual property ownership with land falling in the forefront. The Buganda Agreement (affected the area where Sango bay is located) is analysed below as a case study.

The 1900 Buganda Agreement

In 1900, the British colonial state entered into an agreement with Buganda Kingdom. This agreement later fundamentally changed the land structure and market in Buganda and beyond. The Agreement was signed between Buganda Kingdom and the British Colonial Government. Under this agreement, land in Buganda was alienated into two forms:

- Mailo land, which was donated out to the kingship, the chiefs and some notables. In effect, the Mailo holders acquired title certificates for land occupied by poor peasants who henceforth turned into tenants. The Mailo System created a situation where both Baganda peasants and immigrants on large tracts of undeveloped land were legally rendered landless and actually had to pay "Busuulu" or "Envunjo" rent to the holders of title certificates (ML & PP, 1997). These pay outs were later enshrined in the law. However, the access rights of the tenants were also recognized and they could not be evicted without compensation.
- Crown land; this was alienated for Government purposes. This land was vested in the Queen as the custodian.

The creation of mailo land turned the bonafide occupants into "tenants" and they were required by law to pay rent to their newly imposed "owners"! With time, the `landlords' kept increasing the rates indiscriminately till the tenants became fed up and started agitation. The colonial government was forced to intervene by enacting the "Busuulu and Envunjo Law of 1927 in Buganda followed by the "Toro landlord and Tenant law" of 1937. The titleholders while at the same time holding the sanctity of the rights of the latter aimed these at protecting the occupants from exploitation. It was this period, which saw great leaps in the individualization of land ownership. Access methods were increased to include the options of direct purchase and official alienation of hitherto communal land. In effect, land became a commodity on the market. It could be sold or bought at will or mortgaged by the titleholder when need arose. Inevitably this brought forth some development especially in the freehold and leasehold tracts.

However, the Mailo tracts suffered from under development due to tenure uncertainty arising from title ownership by one party and physical occupancy by another. In some cases like the "lost counties" of Buyaga and Bugangaizi which were annexed to Buganda from Bunyoro

² The parent in principle had to bequeath a piece of land to each of his children. This arrangement became outlandish once the parent had not added any land to what he had inherited since this would have to be sub-divided among his children.

Kingdom by the protectorate Government, the Baganda landlords who took over the ownership rights were even largely absent (ML & PP, 1997). In such typical circumstances, the poor indigenous Banyoro peasants could not do much about improving the land and also the absent landlords could hardly develop the occupied and far a way land. Nevertheless, the colonial legacy in the land question is that the land tenure and management regime in Uganda became characterized by diverse systems operating side by side up to the current day. It is also noteworthy that apart from Buganda and a few areas of Bunyoro, Toro and Ankole, the colonial changes in the land tenure system left many rural areas in Uganda untouched. And indeed, the customary tenure is still very dominant with its demerits.

B.2. The 1975 Land Reform Decree

In the first decade of independent Uganda, there was not much radical transformation in the land tenure and management regime. Nevertheless, there was an Act passed and adopted in 1969 called the "Public Land Act". The Act provided for the protection of customary land rights (Nuwagaba 1997). The major implication of the Act was that for customary landholders, their interests were recognized and protected by law. But apart from this, there was not much change. Fundamental changes in the land question were introduced in 1975 by way of the "Land Reform Decree". The salient elements of the decree among others, included:

- All land in Uganda was declared to be public land. Under the *double production* slogan, people accessed almost any piece of public land they would lay their hands upon. The issues of conservation and environmental management became relegated to the periphery once the coffee boom beckoned coffee dollars on the world market.
- All public land so declared was vested in the Uganda Land Commission (ULC).
- Freehold interests in land were abolished except where such interests were vested in the ULC.
- All freehold land, including Mailo, was converted into leaseholds.
- Customary occupants were deemed to hold the parcels of land at sufferance. This could be terminated at any time without notice.

In effect therefore, the decree legally transferred all land to the state. People using any parcel of land were henceforth understood to do so on a lease basis issued on conditions specifying the purpose for which a parcel of land may be developed and for a period of time limited to 49 years (Republic of Uganda, 1975). Under the leaseholds, the holders therefore were only recognized to have received usufruct rights from the state. For customary occupants who had no legal titles to the parcels of land they occupied, the 1975 decree implied even more serious consequences. They were deemed to hold the parcel of land at sufferance. In other words, they could be evicted at any time and without any legal requirement for prior notification. Rent paying for land by tenants was also removed. However, occupants could be evicted upon payment of compensation. In the recent past, there have been attempts- (which are now in advanced stages) - to radically streamline the land tenure and management regime in Uganda. The 1995 constitution and the 1998 Land Act attest to these attempts.

It is in this same spectre that law enforcement broke down amidst increasing permissiveness. The poaching trade reached all time high with the major items being ivory and coveted game such as buffalo meat and leopard skins. Meanwhile the forests were under equal threat. Uganda lost more trees in less than a decade that it had ever lost, a legacy of political cronyism and the breakdown of public order. The main types included mainly mahogany and other hardwood to the world market and the Middle East and the Orient.

And yet, the 1975 land reform decree was almost a lesson in irony. While most of the land was accessed for export production and commercial agriculture, most of the estates that had been sustainably managed with due conservational measures were laying in ruin. The expulsion of Asians (who were the hub of industrial and commercial activity in Uganda) meant that most

agricultural estates were to remain in ruin. The case of the sugarcane plantations in Sango being abandoned is a case in point. The policies had taken their toll.

The Impact of the 1995 Constitution and The 1998 Land Act on Land Tenure
The first major change is that land in Uganda belongs to the citizens of Uganda and shall vest in them in accordance with the following tenure systems:

- Customary
- Freehold
- Mailo
- Leasehold.

The constitution of Uganda provides that there shall be a District land Board for each district whose functions are:

- 1. To hold and allocate and in the District which is not owned by any person or authority
- 2. To facilitate the registration and transfer of interests in land; and
- 3. To deal with all other matters connected with land in the district in accordance with the laws made by parliament (Article 241 (1) of the constitution of the republic of Uganda, 1995.

It is further provided that in the performance of its functions, a district land board shall be independent of the Uganda land commission and shall not be subjected to the direction and control of any person or authority but shall take into account National and district council policy on land. However, according to article 242, government may under laws made by parliament and policies made from time to time, regulate the use of land. According to article 237 (7), parliament shall make laws to enable urban authorities to enforce and implement planning and development. Those two articles enable the state to take charge of the land and enforce planning and development. The state can use these two articles to zone Uganda for industrial, agricultural and other purposes. It is clear that the freehold system was restored after the repealing of the land reform decree. According to article 237 (4) (b), land under customary tenure may be converted to freehold land ownership by registration. Article 237 (5) provides that any lease which was granted to a Ugandan citizen out of public land may be converted into freehold in accordance with a law, which shall be made by parliament. These provisions have attempted to address the land tenure problems but there still remain major issues.

In the Land Act 1998, a certificate of occupancy to be granted to the occupant on application to the registered owner is provided for. But this is envisaged to depend on mutual understanding between the two parties. The certificate is meant to enable the occupant to prove that he/she is bonafide when need arises. In effect, the bonafide occupants are made statutory tenants of the registered owner and are required to pay ground rate to the latter on a mutually agreed upon rate (Ministry of Lands, 1997). According to the Land Act (1998), the occupants who wish to go beyond the more certificate of occupancy are free to apply to the registered owner and the terms and conditions of the interest shall be mutually agreed upon. Where there is lack of agreement, the sub-county Land Tribunal will intervene. These proposals are envisaged to address the contradictions between de jure and de facto owners of land, paving the way for a more free land market.

The 1995 constitution under which governance in Uganda is currently conducted brought about major changes in the land tenure and ownership. Article 237(8) & (9) of the Constitution guarantees security of occupancy of bonafide (de jure) occupants of Mailo, freehold or leasehold land and Article 26 of the same Constitution guarantees protection of individual property, (Republic of Uganda 1995, 1998). According to the Constitutional provisions:

• All land in Uganda is vested in the citizens of Uganda. This is in contrast to the 1975 decree, which vested it in the state.

- Customary tenants on hitherto public land now own land on which they are settled.
 Previously, these tenants held it at sufferance and could be evicted at anytime and without need for prior notice, but with compensation.
- The bonafide occupants of Mailo Land, freehold and leasehold land have now been recognized and their security of tenure protected.
- Freehold and Mailo tenures, which had been abolished by the Land Reform Decree of 1975, have been restored.
- Land Management functions have been decentralized to the districts.

Basically therefore, the Constitution has redefined land relationships between the state, titleholders, tenants and the public in general. It has changed the situation where the state "owned" the land but could divest it to individuals in form of freehold, Mailo or leasehold grants. The remainder not so divested was deemed to be public land, occupied by individuals at the mercy of the state. In contrast, occupants, including customary, are considered to own the land and may acquire certificates of title in form of registrable interest certificates. Even land, which is unclaimed in customary terms or unalienated in other forms of tenure will be vested in the District Land Boards, which will hold them in trust for the citizens of Uganda.

The Buganda Land Question

Perhaps, nowhere in Uganda is the land issue as sensitive as in Buganda region. While the issue is admittedly a "hot issue" throughout the country, the case with Buganda borders on the sentimental. And the reasons are easily discernible from the key elements of the question:

- Buganda's arrangement with the colonial administration saw the biggest creation of landlords within Buganda.
- The introduction of the mailo system of land tenure was extended to areas outside Buganda.
- Land ownership was used by the colonial state as a tool to elicit political royalty and collaboration for the latter to extended its sphere of influence in the so-called rebellious areas.
- It is through this royalty that many Baganda acquired big chunks of land in Kabaale as a reward for the support the Baganda rendered to the British against the rebellious Kabalega.

One of the major impacts of the land tenure and management systems in Buganda is the constrained land market. Chief among the factors responsible for the constrained land market are; Land encumbrances characterized by Squatters/bonafide occupants which have been protected by the law and compensation is expected before eviction. The titleholders therefore find it difficult to sell the land. However, the tenants also find it difficult to develop and invest in the land, as they constantly fear eminent eviction by *bonafide* owners.

Similarly, most land acquisition is by inheritance. As such, it is deemed almost abominable to sell the "family" land. Understandably, this would lead to landlessness of the next generation. Another debilitating factor has been the issue of politics which has been a major factor inhibiting the land market in Uganda. Any purchase of land by a person hailing from outside Buganda region is even termed as "grabbing". Even leases to foreign investors are often loathed as a way of "selling" the country. As such, the land market in Uganda is characterized by the following feature: Most of the exchange involves the encumbered land characterized by tenants and squatters. Many people own large tracts of undeveloped land, which they are unable to sell due to legal constraints while others who would even be willing to buy lack access. These are serious demand and supply constraints. It is against this background that land pressure has been manifest

in the relatively free market of leaseholds and freeholds while a big proportion of the rest of the land is largely undeveloped. It is in this light that the Constitution of the Republic of Uganda (1995) and the Land Act (1998) attempt to streamline and free the land market in Uganda (Republic of Uganda 1995, 1998).

B.3. Current Policies and Impact on Land Use Change

B.3.a. Structural Adjustment Policies

By 1980s, it was evident that most developing countries were unable to meet the required social expenditure. The problem culminated from persistent decline in terms of trade followed by budget deficits and increasing foreign debt all accentuated by poor economic performance, which made the populace poorer. In the late eighties, there was considerable pressure on governments in many parts of the world, particularly those forced by deteriorating economic circumstances to undertake major economic restructuring, this meant a withdrawal from a stance that implied welfare and state subsidy to imply meeting ones costs for the service consumed. This meant introduction of user charges for services such as health and education, which had traditionally been seen as free. Such charges it was argued would increase efficiency in line with standard neo-classical economic theory.

In Uganda, persistent political turmoil and the resultant dearth of the industrial sector, which plunged the country into economic disequilibrium, compounded the problem. Consequently in 1990, the Uganda government introduced user charges in the key social sectors of health and education. The major changes included the liberalisation of tertiary education including University education by introducing private sponsorship programmes as opposed to the earlier government responsibility for tuition and accommodation costs of all tertiary institutions. These changes were initially challenged by a cross section of the polity as well as parliamentarians resulting into the early suspension of the policy implementation. However, the Government continued and implemented the reforms. For the majority of the populace the going got tough, as the would-be beneficiaries now became the benefactors of the state. This worked within the context of the government's move to rehabilitate the taxing system by scrapping subsidies and ostensibly moves to widen the tax base through introduction of cost sharing and user fees in major social services. Many people as a measure to cope left urban areas and went to villages where they could earn a living from cultivation. This move caused an invasion of the hither to unused lands and some gazetted areas were encroached on. The resultant of this new and re-invented livelihood system became soil exhaustion, fragmentation and degradation in some cases as a coping mechanism encroachment was adopted. This problem was compounded by the introduction of payment of fees at tertiary levels of education, which is the most expensive education venture as well as unprecedented in Uganda. Households turned to their tracts of land³ as a means to meet the health and education costs. This sometimes precipitated landlessness.

B.3.b. Promulgation of National Environmental Action Plan (NEAP)

Uganda's natural resource base is among the most rich and diverse in Africa. In its unique position between the Eat African savannah and the tropical forests of the Congo Basin, Uganda unites 7 out of 18 bio-geographical regions in Africa. This highly diverse landscape features rift valleys highlands, mountain ranges, papyrus swamps, acacia savannas, and an extensive network of rivers and lakes. These varied inhabitants are home to abundant flora and fauna. Uganda ranks fourth in Africa in number of bird species and sub species are unique to Uganda. Nineteen species of primates are found in the country, including over half the World's remaining population of mountain gorillas. Significant elephant populations remain and two butterfly species of particular conservation importance have been identified. Despite the above wealth of biodiversity and natural resources, there are a number of threats

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³ Those that were lucky to have some land to sell and become landlessness. But in most instances, it meant landlessness in the hope that in the long run this financed education would one day pay back the lost land.

and failures that tend to undermine the conservation of these resources. These threats can be grouped into three main categories:

- Habitat loss or degradation and unsustainable use
- Underlying pressures like population growth and poverty
- Institutional, policy and market failures.

Uganda's protected area (PA) system covers approximately 13% of the total land area comprised of National parks, wildlife reserves, and forest reserve. Several PAs have been encroached upon by human settlement. Systematic and consistent planning requires high financial and human resources which government alone may not provide. Data and information to guide protected are planning and monitoring of bio-diversity is not regularly available. Research is limited. These problems occur both within and outside of PAs, limiting the ability to conserve bio-diversity. Poor definitions and allocation of property and user rights makes bio-diversity outside PAs prone to unsustainable use or over-exploitation. Lack of alternatives or provision for sustainable use of bio-diversity found outside critical areas undermine conservation efforts. In addition, high population growth, low technological knowhow, lack of awareness and property augment the problem. Development activities such as industrialisation, trade tourism and agriculture tend to impose externalities e.g. pollution and waste on the ecosystem disruption health thus decreasing bio-diversity.

Development of the National Environmental Action Plan (NEAP) has substantially increased the knowledge base by which management decisions can be made. This is the context in which the National environmental action plan was enacted to improve and create an enabling environment for bio-diversity conservation. The scope of the NEAP covers policy, institutional and financing aspects. The various policies and laws such as the environmental statute, wildlife Act and wetland policy are part of this mandate. Through the NEAP and the decentralisation policy, the local governments are empowered to manage their own environment. However, local level capacity is low and only a handful of Uganda's districts are currently receiving support in environment management. Yet, the implementation of NEAP and decentralisation policy requires that districts participate in environmental management. Vertical linkages therefore need to be strengthened if natural resource management and policy is going to generate the desired results. The demand for decentralised planning brings additional environmental management challenges to the districts, which have no previous experience in such planning. Part of the challenge will be integrating environmental considerations into planning process and making a choice of the appropriate environmental planning tools for that process. Presently, capacity systems information and awareness are very limited. With limited resources available to government and other public institutions, conservation requires the participation of local communities, NGOs and the private sector. Currently, sustainable funding mechanisms for these agencies are not available. Thereby limiting their participation. The use of incentives for biodiversity conservation is not widespread. The few which exist e.g. concessions are under priced and do not reflect the true costs of conservation. The NEAP has been well thought and conceptualised on paper albeit, its implementation is rather demanding from local authorities. Although districts have the environmental knowledge, they have not put it to use in their areas of jurisdiction; land is still degraded and access to fragile sites not inhibited. However, this is not to say that the performance of NEAP has been dismal. The dividends cannot be over emphasised. The few setbacks are only temporally inconveniences to be mounted and overcome. The major benefits of NEAP include the heightened of awareness on environmental issues up to local council level, the various policies and instructional materials passed on to various stakeholders. The local campaigns toward tree planting and afforesting are all courtesy of NEAP. The Soil Water Conservation (SWC) is a result of NEAP and the various initiatives aimed at improving soil cover and prevention of soil erosion. Other initiatives include reduced poaching as well as the national wetlands program.

National park creation

The National parks Act, Chapter 227, Laws of Uganda 1964 is the basic law on the preservation of game national parks in Uganda, and the preservation of national park regions. Provision is made from the Minister of Wildlife to appoint a board of trustees, called 'The Uganda National Parks Trustees.' This board is empowered to make byelaws, which, among other things, prescribe in respect of any or all national parks the conditions under which any person may enter, travel through or reside in such park or parks. Section 14 of the Act provides that, subject to any rights lawfully acquired by any person before the commencement of the Act, no prospecting or mining for minerals shall be carried out on any land situated within a national park except with the consent in writing of the Minister after consultation with the board of trustee. Any person who contravenes this law or the byelaws of the board is guilty of an offence and may pay a given fine or be imprisoned. The creation of National parks was a good thing with some unwanted consequences. While this creation set aside areas whose access was restricted, the same move equally shifted land pressure and fragmentation to new areas. The displaced persons later posed tenure and utilisation problems in the new areas where they settled in form of land degradation, land conflicts and ethnic rivalry. It later turned out that the very creation of National Parks became a breeding ground for subsequent encroachment and infiltration of these protected areas.

B.3.c. Land Restructuring Policy

The land restructuring policy was implemented in Mbarara district in the early 1990s. It aimed at rationalising land use in order to avoid frivolous usage of land resources. Box 1 below illustrates the impact of restructuring on land use.

B.3.d. Decentralization Policy in Uganda

Uganda has implemented full-blown decentralization since 1993 under which the central government has transferred powers and responsibilities to the districts. Under the system, all administrative, financial and judicial issues, which can be handled at district level, are dealt with. As a result of decentralisation each district formed a district land board, which is charged with land administration and handling of disputes. The devolution also enabled the expeditious handling and management of titling and land surveying. The access mechanisms in most districts were eased save for encumbered areas like Kabale district.

However, the pertinent questions that gain credence or suspicion are how the district land boards can help the various households equitably partake of the opportunities of land access, address the issue of who owns the land, how the controls are exerted, how controls can be bought and what are the ways in which people gain control and access to land? The presence of varied social strata and various spheres of influence causes disparities. Where by as a result of this, the less affluent have not been able to benefit from the fact that decision-making organs are brought nearer to the populace. The issues of petty politics and influence peddling are major set backs to the functioning of district land boards. Where by the local elites have taken advantage of the less *well heeled* and used the district land boards to misuse and acquire land through phoney means. While in some cases it has totally hit a snag and become so politically charged that there are no functioning district land boards. The case in point is Kibaale district.

Box 1. A Case of Lake Mburo, Mbarara District

Lake Mburo is located in Nyabushozi county Mbarara District in southwestern Uganda. The administration of this rangeland was based on common property ownership by traditional herds men of Ankole. In the early 19th century the colonial administration had already recognized that Ankole was an area whose potential for cattle rising was being under exploited (Karugire 1971). In 1939 the British Colonial Governor of Uganda advocated for a change over from mixed agriculture to Pure Ranching (Randall 1944). In 1940s, the Veterinary department tried to eradicate Tsetse flies from Ankole and agitated for the establishment of additional permanent water supplies in Ankole Kingdom. For example, there was construction of the valley dams in the traditional Nshaara range in L. Mburo area to support cattle grazing. This strategy was expected to curtail normadism in the kingdom. In 1950s the British District Commissioner of Mbarara was requested to bring the traditional hunting ground in lake Mburo under some control. He visited the area in 1954. He recommended for the conservation of wild animals and the establishment of a game post at Rwetsirabo. It is during this time that most of the land between Lyantonde and Biharwe became a controlled Hunting Area. The period of 1960s saw a deliberate tsetse fly control programme and a subsequent demarcation of ranches up to 1975. The resultant effect of these programmes was the leasing out of the previously communal grazing land to private ranchers. This hence led to emergency of private commercial ranch systems (Land Lease policy and privatisation of land). The period after 1990 saw tremendous change in land management and use practices. The general picture of development in Uganda between 1990 and 1999 was of increasing commercialisation of farming in the area. This development pattern was associated with a change in land use including expansion of cultivated areas, settlements, woodlots and declining land for fallow, grazing land forestry and wetland. It should also be noted that the period between 1973-77 was characterised by an upsurge in land privatization especially in the counties of Kashaari and Nyabushozi. This saw the influx of herdsmen most of whom were into L. Mburo game reserve corruptly allowed. This process not only increased land for grazing but also reduced availability of woodlots and increased the reclamation of swamps as people continued to settle in the area. (Muhebwa 1992). Ownership of cattle in L Mburo ranch region continued to increase. In 1993, there was land restructuring in Ankole-Masaka ranching scheme. This led to change in land use. This was driven by the government policy of modernization of agriculture and commercialisation. The policy has led to a change from communal land to private ownership. However, some of the land still remains and remained part of the national park. The land restructuring influenced investment in infrastructure, transport and recently the valley dam construction for water supply and agriculture transformation in L.Mburo area, although this venture 9valley dams project) was largely a fiasco.

It is imperative to note that the change in land use in the L. Mburo area did not entirely depend on land restructuring in the area. In the early 1990s, government resettled the landless immigrants and refugees in some parts of lake Mburo region. The resultant land uses were settlements in the game corridor, establishment of L. Mburo Secondary School (Kanyaryeru) and the growth of Kanyaryeru trading centre. The school has attracted more settlements of the Bahima pastoral community of Ankole origin. New farming patterns comprising of paddocking cattle emerged. The resettlement scheme supported individual holdings as opposed to communal grazing. This has resulted into individualization of land previous owned under communal ownership. The argument is that the former land tenure is more productive than the latter. Hence, most land parcels in Ntungamo and Mbarara have been turned into private property. (Sources Karugire et al 1971, Kamugisha J 1993, Kasoma P. & Kamugisha J 1993, Kisamba – Mugerwa W.1991)

The adoption of decentralisation as a mechanism to promote good environmental governance in Uganda resonates strongly with international trends. The aim is to form a strong partnership with organisations focusing on sustainable management of local environments. The ethos is characterised by faith in participation and sustainability as a means of improving Natural Resource Management. New district and local environment committees are responsible for promoting greater citizen participation in natural resource management. Through co-ordination efforts by district and local environmental committees, local populations are transformed into amenable and active partners in sustainable environmental management.

A fundamental assumption underlying decentralisation initiative is that local participation is critical to sustainable natural resource management. Excluding individuals in managing natural resources, as well as sharing in their benefits, it is widely believed precludes their interest in their sustainable use. As Marsden explains, local actors will be more responsive to intervention 'if they are given greater control over the design and implementation of programmes.'

Again, the thinking behind current interventions in local environmental management is that resource control may be returned to local communities, assuming these complement larger sustainable use objectives

However, incorporating NGOs and CBOs into a common plan for environmental management is also risky. Ideally, NGO and CBOs counter the limitations of state sanctioned forms of environmental management and suggest alternative ways of organising natural resources management. An emphasis on similarity and agreement between governmental and non-governmental approaches to the environment underestimates the importance of difference and the need to locate multiple approaches for managing the environment for different actors and in multiple contexts. Decentralising natural resource management therefore has many benefits and constraints. Not all environments need protecting and not all practices need changing. Decentralisation opens new pathways of governance and administration that can be used to facilitate more positive environmental outcomes for a grater number of people. Be as it may, the decentralisation of natural resource management was a step in the right direction, which only needs streamlining.

B.2.e. Settlement Schemes Policy

A resettlement scheme is a planned and controlled movement of people from one area to another. In Uganda, the need for population resettlement arose from a number of related aspects of the country's economy:

- 1. The existence of potentially rich agricultural land, which lagged behind in development because of low population densities.
- 2. The desire to prevent the incursion of the tsetse fly which spreads bovine and sleeping sickness into new lands, and where t has been cleared, to prevent the flies resurgence.
- 3. In areas of rural over population, resettlement policy aim at reducing population pressure through force or persuasion to areas where development would be advantageous.

In some parts of the country where plantations were established resettlement policy had a secondary aim to provide labour for the plantations and the increase in out growers schemes manned by the settlers. There was also the need to resettle those displaced by civil wars. However, the study of resettlement schemes in Uganda has been problematic. The first problem in this study has to do with the demarcation for the economic interrelationships of resettlement policy with other land using activities especially agricultural and livestock production policies, and the claims of forestry and game land.

Secondly, in Uganda, resettlement policy has been the concern of several decision-making bodies, including agriculture and veterinary services and the ministry of local government. There is also conflict in the figures of the numbers of government-assisted settlers, and where they are settled. The voluntary migration and the lack of close monitoring by the government of the settlers in the resettlement schemes created new problems. As Kabera asserts:

"...there are indications that the means of securing land (by settlers) are in some cases contrary to government laws and policy. In certain cases even gazetted lands have been infiltrated long after the lands had been declared government reserves. The game reserve in Isingiro County, Ankole has been infiltrated." (Kabera 1983, p. 73).

Causes of Settlement in Lake Mburo Game Reserve

The process of settlement in this area was driven by two factors; land shortage in the home area, and the availability of unclaimed land or not under the jurisdiction of other groups in the game corridor. Large-scale movement of Bakiga into the game reserve began in the late 1950s; migration to the area was driven by severe land shortage in Kigezi district. Land shortage is a well-known and well-documented problem in Kabale. In 1980, there were an estimated 94 persons per sq/KM of arable land in Kabale, as compared to the national average of 75 persons per sq. KM. This also worked hand in hand with the ethnic crisis in Rwanda next door and the refugee crisis, the nomadic life of the refugees themselves-Tutsis and the indigenous Banyankole who were nomads themselves. The locals felt good extensive land was itself being annexed by refugees while they were previously having only *part-time* access to this extensive pasture during dry spells. This cocktail of migrations and the resource rush mingled to form a consistent encroachment on delicate natural resources.

C. THE IMPACT OF LAND TENURE ON UTILISATION

C.1 The Impact of Land Tenure on Access to Land

Land utilization relates closely to the different tenure systems. This is because the purpose, interests and rights of the parties involved impact greatly on the activities and innovations that the occupants and/or owners can undertake on the land. The most developed pieces of estate in Uganda are generally to be found under the freehold and leasehold systems. These are mainly found in the urban areas. The main reason is that relatively, the holders enjoy unquestionable and unimpeded user rights fully backed by the law. As a result, the holder is in position to inject in any amount of capital he/she so wishes to develop the land. The implication here is that majority of the population have resorted to trying to access land for cultivation and grazing a condition that has culminated into excessive and sometimes unwise utilisation and subsequent degradation.

Land Management Regimes

The land management regimes manifest in the area include:

- Private property
- Common property
- State property Open access.

Under private property, the owner households enjoy full rights of accessibility and exclusive use. They are free to transfer the land to other households at a consideration or to divide themselves by way of inheritance. Common property encompasses resources (land) for the use of the community. This includes public grounds, virgin areas and common grazing fields where everybody is free to graze animals without hindrance. However, the communal usage is limited to precisely defined groups clearly known and identified by the rest of the 'community members' the specific rights and obligations expected of each community member. The state property mainly includes gazette areas for national parks e.g. lake Mburo, state farms, land in townships, and forest resources such as Bugamba. Here, the private households have

Box 2. A Case of Ntungamo

The changes in farming systems in Ntungamo district started in 1959. This year was marked by heavy influx of Banyarwanda refugees of Tutsi ethnic group. The refugees fled their country after the Hutu ethnic group violently captured state power. The refugees most of whom were cattle keepers settled in areas of Orukinga and Nakivale in Mbarara district but later spilled over to other areas of current Ntungamo district.

The influx of the refugees caused a significant change in the land use structure. Cattle keeping gained currency even in areas which initially had no cattle. This development intensified pastoralism, which in some cases encroached on land under cultivation (Karugire 1971). This later resulted into conflict between the indigenous population and the refugees over land resource use. In 1982, the Uganda government intervened in these growing conflicts by throwing out the Banyarwanda refugees. The indigenous population had complained of dispossession by refugees.

The recent policies that have impacted on land use change include; the liberalization policy. This policy encourages the private sector as an engine of growth. It has led to milk processing plants in the near by Mbarara district. Private farmers have now been encouraged to increase milk production. This has been done through keeping hybrid diary animals. These animals require controlled grazing, which is efficiently provided under privately owned farms.

The commercialisation of agriculture in Ntungamo district has led to expansion of farming and cultivable land. This has reduced available land for other uses such as woodlots and wetlands. The situation was exacerbated by land pressure form Kabale district due to population explosion. This meant that the district next door in this case Ntungamo became a destination of the 'surplus' population who found a place of aboard. The district of destination; in this case Ntungamo became a bulwark against landlessness, while the durational home remained Kabale. This meant increasing land pressure in Ntungamo as well which has a relatively extensive and intensive land use orientation due to pastoralism from the indigenous Bahima sub-tribe and the migrant —refugees from neighbouring Rwanda.

One other critical policy that has influenced land use change in Ntungamo district is the Decentralization Policy. Since 1993, the Uganda government has devolved, administrative, judicial and financial powers to local governments. These comprise the districts and sub-counties (Local Government Act, 1997). The Act empowers the district to enact byelaws and ordinances related to natural resource management including land use management. This Act also alienates public land under the jurisdiction of the district. This aspect has reduced encroachment on public land.

restricted accessibility to the resources. The community has promulgated strict byelaws backed with heavy sanctions to bar unscrupulous encroachers on the state resources. However, there is still rampant encroachment on these state property resources. The major issue is lack of harmonising the benefits accruing from such state property resources to individual households. There is a general perception that households in the area do not benefit from these state property resources such as National Parks. This perception has been partly the reason for depleting such resources. Finally, the open access tenure encompasses tracts of and water resources where the community is free to utilise the resources but without hindering accessibility to others. This mainly involves some grazing fields, rivers like Rwizi and lakes like Nakivale.

C.2. Knowledge of and Attitudes towards Farming Practices

The areas in which the refugees are concentrated exhibit the problem of land degradation. Most of the available land is marginal in nature and is not under private property for instance unlike other parts of Mbarara district, which enjoy good climate, fertile soils and ample vegetation cover, the refugee areas exhibit a predominantly harsh environment. The soils are poor, rains scanty and temperatures high. Serious land degradation is manifest with gullies, sparse vegetation cover, aridity and dropping yields clearly evident. The main activities responsible were found to be rampant grass burning overgrazing, cutting trees and over cultivation. As re-iterated in one Focus Group discussion in Ntungamo District:

"we know that our activities have a negative effect on land but we do not have any alternative land scarcity, poverty amidst need for more numbers of cattle".

However other respondents, pleaded ignorance of their activities on the environment. It is apparent that majority of the people cannot carry out such conservation activities as crop rotation, fallowing, rotational grazing and a forestation due to lack of enough land. In the area of study land use practices were mostly found to be detrimental to land conservation. They were found not to be purely dictated by ignorance but also land scarcity, ownership, poverty and sometimes the sheer marginal nature of the land itself. There is little doubt that urgent attention is necessary to halt the fast march to desert conditions.

The population especially in the drier areas were aware of few of the elements related to land degradation. This was mainly to do with the concept of degradation itself and also some of its causes. The guttural relationship between knowledge and practice is explained by a number of reasons. People who are aware of some degradation activities actually carry them out due to land scarcity and a high cost of the land amidst increasing herds. Hence, there is no evidence of organised community response directed at alleviating the problems of over cultivation, overgrazing, bush burning or any other degradation activities. The few households that carry out some conservation activities appear to do so unconsciously. Even fewer households were able to perceive conservation as an urgent priority arguing that the prevailing circumstances cannot allow.

Conservation efforts seem to be hampered by negative attitudes and deficient perception of the problem of land degradation. Even a good number of those who seem to know the implications of natural resource degradation claim that they are incapacitated by circumstances like land scarcity. None the less, some Local Council officials have sensitised some households with "cut a tree and plant another" gospel. In a few instances, anti-grass burning policies have been adopted by some local officials, though it is always difficult to catch the culprits. While environmental NGOs and CBOs are very vibrant in many other districts in the country, Ntungamo district has been at the bottom. Most NGOs in the district are involved in income generation and literacy programmes. Even the official aid agencies to the district such as UNHCR seem to be interested in the day-to-day needs of the refugees other than the environmental status of the area. In the final analysis, the limited land conservation practices in the area including crop rotation, bush fallowing, a few individuals mainly effect a forestation, rotational grazing and mulching. Even then, these practices are done more as a routine rather than consciously initiated responses to a worsening problem. There are various views regarding natural resource use in the area. The elders in the study revealed that:

"Over cultivation is rampant but it takes along time for soil to loose its fertility. The problem of environment and natural resource (land) degradation in the area is mainly economic. It is the high charge of school fees, which leads to either uncontrolled use of land for it to yield maximally."

Levels of Technology in Agriculture

Population density affects the labour intensity of agriculture by affecting the land/labour ratio, and may also induce innovation in technology, markets and institutions, or investments in

infrastructure (Boserup 1965). Population pressure thus affects the comparative advantage of labour intensive pathways of development, as well as returns to various types of investments. Consideration of these factors suggests potential for several types of crop –oriented development pathways intensive production of perishable products such as diary and fish farming are likely to be suited to areas of high market access and high population density. Extensive production of high value livestock that are relatively easy to transport, such as cattle and small ruminants, can occur in areas far from markets, and tend to have a comparative advantage in areas that are low in potential for crop production. Diary products may also be produced in such extensive systems in lower potential areas, but high access to collection and processing facilities or to urban markets is essential. Other animals such as pigs and poultry can be raised for subsistence purposes in many areas, but intensive production for the market is likely to occur mainly close to urban areas, due to economies of scale production, relatively high costs of transporting them relative to their value, or the use of purchased compound feeds. Mixed -crop livestock is likely to be important, with farmers keeping animals for ploughing, consumption purposes and as a form of savings. This is because the benefits of exploiting complementarities between crop and livestock production rise as population density rises, particularly where markets are not well developed. These changes can be affected by cultural views. For example, in Ankole farmers are reluctant to use cattle for ploughing, preferring not to use them as 'beasts of burden'. The nature of soil (i.e. how heavy or light) also affects whether animals can be used for tillage.

The Land Market

Land under the above two systems is easily transferable. It can also be mortgaged as security for Bank loans and enjoys a freely moving market value. In contrast, mailo land normally has two parties involved namely the titleholders and the bona fine occupants (Kisamba, 1992). Utilisation here is constrained by the fact that the immediate occupants lack the legal titles and hence find it unwise to invest heavily in the land. Often, the occupants are also poor peasants who lack the necessary resources for any viable developments. But in the same vein, the titleholders, often "rich", also find it difficult to utilise the land, as they would wish due to the encumbering occupancy by the tenants/squatters. Indeed, the latter are even protected by the current law and they are entitled to compensation in case of eviction (The Uganda Constitution 1995). Utilization in the customary tenure usually revolves around the traditional basic needs of man. Found mainly in the rural areas, shelter, subsistence, cropping and animal rearing are the major activities. But while the occupants lack legal titles, there is relative security of tenure and individual/family rights are recognised traditionally. In fact the land is even transferable locally but cannot be mortgaged.

Under the communal system, land is communally used. Predominantly, this is manifest in pastoral areas of Karamoja, Ankole and Teso. The community enjoys open access to the land resulting into over utilization and degradation. The case in Sango bay illustrates this scenario (Box 3).

Box 3. A Case of Sango-Bay

The land tenure system has been managed under common property regime. This has made the area prone to overgrazing by cattle keeping. This is made worse by the cattle keepers who have invaded this area from the Ankole cattle corridor and neighbouring Rwanda in form of refugees. This type of land management attracted settlements in search of free land particularly for grazing. The area has suffered from what Harden (1968) calls "The tragedy of commons". Every household in the area has been striving to maximize benefits from such vast area of common grazing land. There has been evident degradation and deforestation caused by uncontrolled cattle grazing in the area

Gazetting by individuals for private access is not acceptable (Kisamba 1992). The land tenure system in Uganda developed from the colonial lynchpin. In 1894, Uganda was declared a British Protectorate and in 1900, the British colonial state entered an agreement that defined land management and tenure regimes in Buganda It is argued that poverty alleviation is a function of land management and prudent efforts aimed at generating incomes and savings must focus on land management and tenure. When the land rights are perceived as unsatisfactory, in some cases this leads to various coping mechanisms that in some areas have led to encroachment on valued environmental components. In other cases also, the establishment of game reserves and protected areas have resulted in various coping mechanisms in search of livelihood that has sometimes degraded the environment. Similarly, other socio-economic variables such as gender and level of property owned —which determines ones level of poverty are closely associated with poverty alleviation. Whereas gender prescribes ones access to resources particularly land. In most areas in Uganda, Women do not own land. Land ownership is a preserve of men.

Land utilisation

The data indicates that a big proportion of land was under crop cover. Most of the land being under crop cover would have been a good soil conservation measure in terms of scorching and erosion mitigation. What needs to be known is that the land under crop cover suffered its own setbacks. Such intensive land use soon degenerated into deleterious effects on the soils such as soils exhaustion and high risk of soil erosion due to weakening of the soil texture. However, this had other however, there was a significant difference in the proportions of land under crop as noticed in the different study sites. It was shown that Mbarara has a higher proportion under crop than any other location studied. It is believed that the soil fertility preservation methods applied have a direct hinge on the land under cultivation. For example, Rakai, which fared lowest in soil fertility preservation, is also the one having a small proportion of land under crops. Figure 2 shows the findings.

One of the major driving forces behind the proposed changes in land tenure and management systems is to free the land market. Currently, the market is very constrained. Chief among the factors responsible are:

- Lack of legal titles by the owners: This is especially so with customary ownership and yet this constitutes the bulk of the land in the country.
- Squatters/bonafide occupants: the law protects these and compensation is expected before eviction. The titleholders therefore find it difficult to sell the land. This is especially common with mailo land tenure.
- Culture: Most land acquisition is by inheritance. It is deemed almost abominable to sell the "family" land. This often leads to landlessness of the next generation.
- Politics: This has been a major factor inhibiting the land market. Any purchase of land by a person from outside a particular region is termed as "grabbing". Leases to foreign investors is often loathed as a way of "selling" the country.

As such, the land market in Uganda is characterized by the following features:

- Most of the exchange involves the unencumbered free holds and leaseholds.
- Customary holding rights are usually exchanged between people from the same area. Civil institutions like LCs (Local Councils) and elders play a major role in the process since there is lack of legal titles.
- Foreign investors are very constrained in trying to acquire access rights to land for investment.
- Most of the land in Uganda is not acceptable to Banks as security for loans due to lack of legal titles and/or occupant encumbrances.
- Many people own large tracts of undeveloped land, which they are unable to sell due to legal constraints while others who would even be willing to buy lack access. These are serious demand and supply constraints.

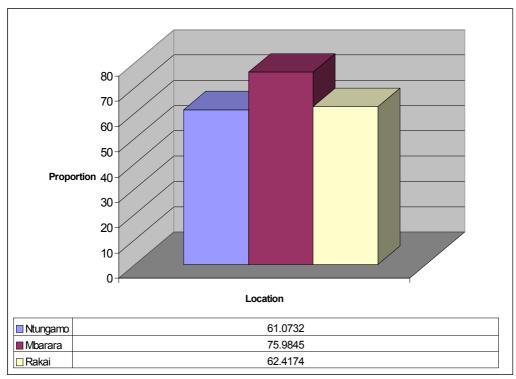


Figure 2. Proportion of Farm Land under Cultivation

It is against this background that land pressure has been manifest in the relatively free market of leaseholds and freeholds while a big proportion of the rest of the land is largely undeveloped. It is in this light that the proposed land bill attempts to streamline and free the land market in Uganda (Ministry Lands, Housing and Physical Planning 1997). Article 237(8) & (9) of the constitution guarantees security of occupancy of bonafide (de jure) occupants of Mailo, freehold or leasehold land and Article 26 of the same Constitution guarantees protection of individual property, (Republic of Uganda 1997). Parliament is also to enact a law providing for the acquisition of land that can be registered by occupants. In the proposed draft bill, a certificate of occupancy to be granted to the occupant on application to the registered owner is provided for. But this is envisaged to depend on mutual understanding between the two parties. The certificate is meant to enable the occupant to prove that he/she is bonafide when need arises. In effect, the bonafide occupants are made statutory tenants of the registered owner and are required to pay ground rate to the latter on a mutually agreed upon rate (Ministry of Lands, 1997).

According to the proposed Land Bill, the occupants who wish to go beyond the mere certificate of occupancy will be free to apply to the registered owner and the terms and conditions of the interest shall be mutually agreed upon. Where there is lack of agreement, the sub-county Land Tribunal will intervene. These proposals are envisaged to address the contradictions between de jure and de facto owners of land, paving the way for a more free land market.

D. POPULATION CHANGE AND LAND USE PATTERNS

D.1. Distribution of respondents

A total of 297 households were interviewed, of which 110 (37%) were from Ntungamo, 96 (32.3%) from Mbarara and 91 (30.6%) from Rakai districts respectively.

From Table 1, majority of husbands (125, 50.4%) were aged 31-50 years, while 20% were aged more than 50 years. There were about 1% aged 18 to 20 years. The data indicated the average age of husbands to be 40.7 years, with the youngest being 19 and oldest 90 years.

Table 1. Age of Husbands

Age Category	Freq	%
18-20 yrs	3	1.2
21-30 yrs	69	27.8
31-50 yrs	125	50.4
51+ yrs	51	20.6
Total	248	100

In the study it was hypothesised that women are the major interface with natural resources, especially land. The women were the key factors in tilling and soil utilisation although in most cases they did not own the land.

Table 2. Age of Wives

Age category	Freq	%
18-20 yrs	28	9.6
21-30 yrs	121	41.3
31-50 yrs	108	36.9
51+ yrs	36	12.3
	293	100.1

Table 2 indicates that most wives in the surveyed households are aged 21-30 years (121, 41.3%), while those aged 31-50 years are 108, 36.9%. The average age of wives was found to be 35.1 years, with youngest being 18 years and the oldest 80 years. The fact that young girls get married to men that are older than them brings in this big age differentials. This has been by the statistic indicated (X2=189.018, DF=9, P=0.000). The age differential leaves most big decisions to be taken by husbands as the wives are looked at by their older husbands as children. The implication here is that decision-making keeps skewed where husband take an upper hand as wives remain non-participants hence exploited.

D.2 Population and Land Resource Management

For those focusing on more 'manageable' aspects of the degradation problem, such as conservation engineering, the population-environment link is no more than a convenient point of departure. And the logic does seem simple: demographic pressure implies more intensive use of natural resources, which translates into environmental decline (Holloway 1992). We opt to challenge conventional wisdom by asserting that there are no significant direct links between human populations and their environments. Consistent with classical theories of human and cultural ecology (Hawley 1950, Steward 1955, Cohen 1968), the tone maintains that human populations are 'cushioned' from their natural environments by elaborate cultural and organisational systems. These systems change and adapt as populations expand and as resources grow scarce. For this reason it ought to recognised that we cannot solve population -resource problems simply by slowing population growth or increasing available resources through technological innovation (Simmons 1988:152). There are bound to be many context specific successes and failures. However, we now need to begin to explain, in conceptual and empirical detail, the particular social, cultural, and economic mechanisms through which mounting demographic pressure affects land degradation. Understanding these intermediate relationships will vastly broaden our spheres of policy action in the struggle to conserve precious resources. This is particularly true in those areas where rising population densities are threatening long-term environmental sustainability. Land as an important asset for the poor provides a basis for shelter, food production and other livelihood activities. This means that the poor depend on secure land access for food security, any interruption in the land user rights is an express interruption of their means to live. Therefore, for Uganda secure land rights in land and control over its produce are an important basis for farmer motivation. Alongside the productive advantages, secure land rights can improve sustainable land management and access to credit, and serve as a source of security in times of crisis. For

Uganda's GDP agriculture remains an important contributor, since it makes a critical contribution to growth, employment, and livelihoods among many households. The other crucial aspects of land utilisation where policy comes in are the natural assets associated with land; fertile soils [e.g. river valleys and mountain/hill tops] for crop growth, water for domestic supplies, forests and natural pastures. It is what government prescribes in relation to these aspects of land access and utilisation that later translate into constrained or enhanced livelihood systems of the vast majority of the poor.

D.2.a. Analysis of Labour and Land Resource Interface

Households were asked to indicate if the husbands were living on farms or not. It was found that most husbands were living on the farms apart from Ntungamo and Rakai where a significant proportion was living off the farm. This could be explained by the social economic characteristics of the community where the households are located. Most households practice free grazing and they keep on looking for new grazing areas. This has serious implications for degradation as most households concentrate in one area for grazing at the same time.

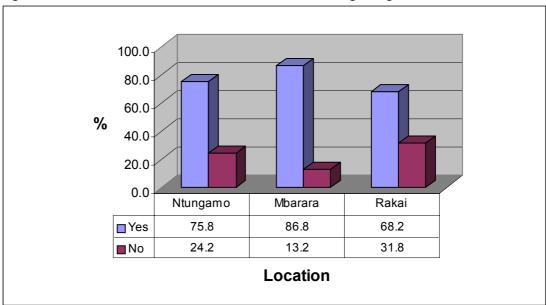


Figure 3 Husbands Living on the Farm

Figure 3 indicates that whether the husband is living full time on his farm varies between research sites (X^2 =8.744, DF=2, P=0.013). Most husbands in Mbarara live on their farms, compared to those in Ntungamo and Rakai. Households were also asked to indicate if they had adult sons living on farm, and the analysis was done for those that had at least one or more sons that were also living on farm.

From Figure 4, it is evident that labour is a real factor in land management. It is clear that 85% of the households do not live with any of their adult sons on the farm. The implications here are varied. These withdrawn valuable hands from the farm and therefore reduced on farm productivity has serious implications for household food security as well as household incomes. The frail parents with sapped energies cannot meaningfully utilise land and manage its produce sustainably. It was established that majority of households did not have sons aged 20 years and above that were living on the farms. Only 15% had sons living on farm. Of the 41 households that said they had sons living on the farm, the average number of sons is 2, with the minimum number being one and maximum 4 sons living on the farm. Having sons living on the farm has serious implications for land fragmentation and subsequent overuse resulting into degradation. In Ntungamo district, there is evidence of serious fragmentation of

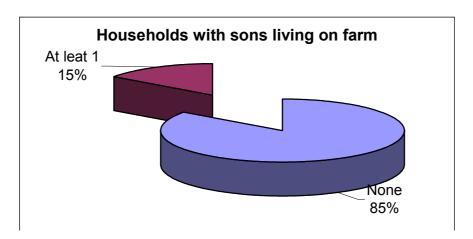


Figure 4. Households with Adult Sons Living on the Farm

previously consolidated land due to the need to pass on some land to children. However, with clear evidence of copping mechanisms in soil fertility management taking root and being appreciated.

D.2.b Household Migration

The data indicated in general that about 59.4% (161 households) had never shifted, leaving 40.6% having shifted because of one reason or another. The main reasons for shifting are represented in Figures 5 and 6.

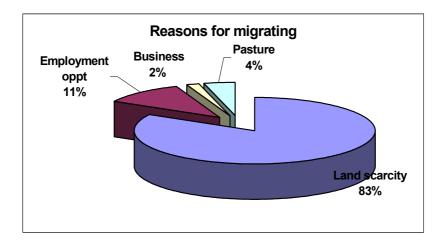


Figure 5. Reasons for Out-Migrating

The most common factor that has been making people shift from one place to another is scarcity of land (83%). On the other hand, 11% indicated the need for employment as the most important factor. Other reasons reported include business opportunities and looking for pasture for the livestock. The analysis of these reasons was pressed further in terms of location of households. Land was generally the main reason for shifting, but it was slightly less in Rakai than any other location. This was because the major land use in Rakai is free grazing. Employment opportunity as a reason for migrations was high in Ntungamo and Rakai, but less in Mbarara. Migrations to Rakai were mainly for pasture while the need for business led more people to Ntungamo than in other location. This seems to indicate the major shift in population has been due to land shortage. Scarcity of land has been due to land shortage. Scarcity of land has a great bearing on land utilisation and subsequent degradation.

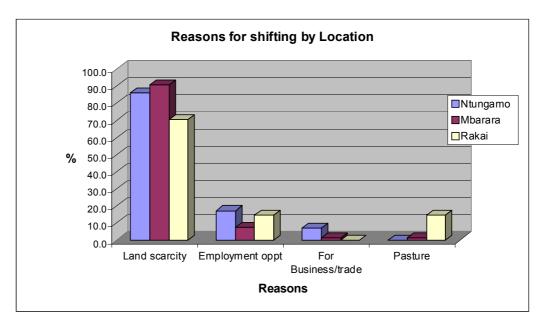


Figure 6. Reasons Given for Out-Migrating by Site

D.2.c. Use of Soil Management Practices

Households were asked to indicate what techniques are used to improving soil fertility, and which crops they used them on. Among the techniques included use of household residues, animal manure, stone bunds, fanya juu, erosion trench, grass lines, trash lines, chemical fertilizers and fellow. Each of these techniques was rated by the respondents in relation to its contribution to improving soil fertility. The findings are indicated in Table 3.

Table 3. Importance given to various methods by respondents

Activity/Method/Technique	Ave. Rate (0 to 9)
Household residual	1
Animal manure	2
Stone bunds	2
Fanya juu	2
Erosion trench	3
Grass lines	3
Trash lines	2
Fallow	2
Chemical	4

The ratings of the techniques were as follows:

- Technique with an overall poor effect in improving soil fertility (weight of 0).
- Techniques considered fair had a total weight ranging between 1 to 4
- Good techniques had a weight of 5 to 8
- Very good techniques had a weight of 9 and above.

Another variable that was analysed was the perception of the respondents toward the contribution of various techniques to soil fertility. Their performance at various study sites is indicated in Figure 6.

Another issue of interest was the land size as a variable in revitalising soil fertility. It was hypothesized that the amount of land one had influenced the extent to which one replenished the soil fertility. Figure 7 indicates the findings. The less land one had, the fewer chances one

had of improving soil fertility. This is perhaps due to more options among the land users with large acreages.

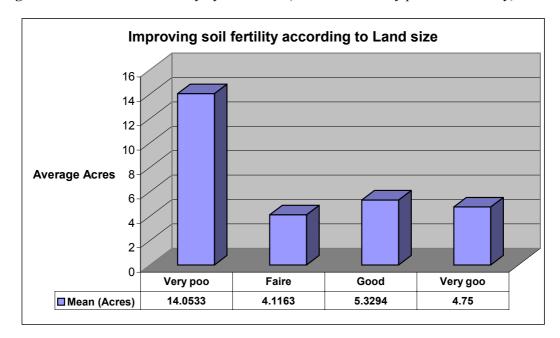


Figure 7. Perceived Soil Fertility by Farm Size (Mean farm size by perceived fertility)

Regions with relatively big farms tended to say that their soil is less fertile soil. This was apparent in the fact that Ntungamo which was portrayed as having a good level of soil fertility had households with small land (average 2.9 acres) compared to Mbarara (7.2 acres) and Rakai (5.2 acres), which had less fertile soil. When the analysis of factors likely to influence the soil fertility was pressed further, data indicated no significant relationship with the level of education of the husband, (X2=7.39752, P=0.28564), or whether the husband is living on farm or not (X2=7.20626 P= 0.06561). Other factors that did not seem to influence soil fertility included the gender of the person looking after a farm (X2=3.35110 P=0.34059). However, the data does indicate a relationship between the primary occupation of the head of household and perceived soil fertility. Table 4 indicates the findings.

Table	4	Perceived	soil	fertility	in	relation	to	nrimary	emnl	lovment	αf	household head
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	V. Poor		Fa	air	Go	ood	V.G	Total	
	No	%	No	%	No	%	No	%	No
None	5	9.6	24	46.2	22	42.3	1	1.9	52
Farming	6	3.6	75	44.6	72	42.9	15	8.9	168
Trade	0	0.0	9	40.9	9	40.9	4	18.2	22
Civil service	1	10.0	2	20.0	6	60.0	1	10.0	10
Crafts	0	0.0	5	62.5	2	25.0	1	12.5	8
Casual	1	20.0	2	40.0	2	40.0	0	0.0	5
Cattle	2	50.0	1	25.0	1	25.0	0	0.0	4
Fishing	0	0.0	2	100.0	0	0.0	0	0.0	2
Total	15	5.5	120	44.3	114	42.1	22	8.1	271

Table 3 shows that households that had very poor soil fertility are involved in cattle keeping (50.0%) and casual labour. Those involved in casual labour are mainly poor and do not have financial resources to invest in their farms. However, the households involved in cattle keeping normally have large land sizes and may invest in maintaining soil fertility since their concern is grazing quality. The highest soil fertility was found on farms of traders, civil

servants and farmers who are the best informed and financially most capable group. The majority of these households had soil fertility concerned as "good" while others had considered fair. (X2=33.77575, P=0.03829)

Another immerging issue is the method of feeding animals. Figure 8 shows the various methods of feeding animals in the study sites. One can see that most animals were grazed on communal land. Others feed their animals from either neighbour's land, while many tethered their animals.

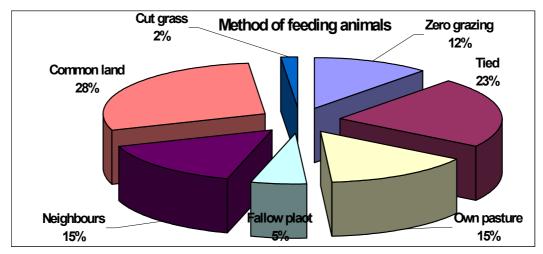


Figure 8. Methods used to Feed Animals

Table 5. Changes in use of techniques for improving soil fertility

Techniques	No change		Reduced a		Reduced a		Incr	eased	Incr	Total	
			bit		lot		a bit		a lot		
	No	No %		%	No	%	No	%	No	%	No
Household residues	168	69.4	3	1.2	2	0.8	58	24.0	11	4.5	242
Animal manure	62	65.3	5	5.3	1	1.1	19	20.0	8	8.4	95
Fanya juu	16	50.0	1	3.1		0.0		0.0	15	46.9	32
Erosion trench	75	56.8	9	6.8	13	9.8	26	19.7	9	6.8	132
Grass lines	29	56.9	1	2.0		0.0	19	37.3	2	3.9	51
Trash lines	30	81.1		0.0		0.0	7	18.9		0.0	37
Chemical fertilizers	1	20.0		0.0		0.0		0.0	4	80.0	5
Fallow	84	77.8	19	17.6	4	3.7		0.0	1	0.9	108

Table 5 shows that the use of most techniques has not changed apart from chemical fertilizers where the majority of households (80%) has increased its use by allot. This indirectly shows the realization of loss of soil fertility by the farmers and hence the need to do something to improve soil fertility. Over the years it was found that farmers have adapted various soil fertility preservation methods. The findings are indicated in Figure 9.

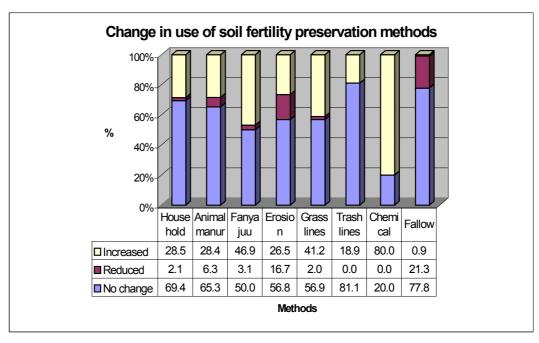


Figure 9. Change in Use of Soil Fertility Management Methods

The use of chemical fertilizers has increased over time. There has been reduction in land fallow and erosion trenches. Land fallow can be explained by reduced land and hence the little available is under a lot of pressure from desperate peasants. A number of techniques have not changed in the way they are being used as shown in the graph above.

D.3 Land Utilisation and Deprivation: Hardin's theory of the Tragedy of Commons In the past up to early 1980's, most of the areas of Mbarara and Ntungamo districts were mainly inhabited by Bahima pastoralists who moved from place to place in search of pasture and water for cattle. Land was mainly owned as a common property and therefore open to all. The hallmark of this setting was unregulated and unlimited utilisation of the available land as each individual farmer feels that once they leave then they have no control over what they have left behind. There is a common held view that, in order to be secure, rights to natural resources must be properly registered as held by individuals and that economic progress will only materialise under the conditions of privet property rights. The obvious underlying notion is that indigenous tenure systems lack security and disfavour long-term investments. The proponent of this view is the biologist and human ecologist Garret Hardin (1968). The gist of Hardin's argument is when land is held in common, the rational economic behaviour of the individual generates an overall deterioration of the resource base. Common property is thus doomed to overexploitation, while private property ownership lends itself to investment and protection of the resource base.

Mbarara and Ntungamo were examples of Harden's theory of the Tragedy of Commons. The Theory stipulates that there is maximised individual exploitation (as opposed to utilisation)⁴ of the available resources to the point of unsustainable utilisation. Such trends eventually reach tragic proportions as in principle you cannot cheat nature. The concept is therefore a maximum exploitation of the resources that there be to a point of degradation. By each person trying to keep as much cattle as possible the rules of land carrying capacity are violated which have sure consequences. As a 'rational' decision maker each herdsman seeks to maximise private gain. This a kin to self-mutilation; because you won't find it, then why leave it? This is the tragedy of common property.

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⁴ Italics added

As mentioned previously, population growth is expected to cause expansion of cultivated area in less densely populated areas where expansion is feasible, or to increase the labour intensity of agriculture where expansion is less feasible (Boserup 1965). Increases in the labour intensity of agriculture has led to declining fallow, adoption of more labour –intensive methods of cultivation (e.g. increased cultivation and weeding, composting, mulching), labour intensive investments in land improvement e.g. Construction of soil bunds, tree planting), or adoption of more labour –intensive commodities. In general unless accompanied by land degradation, intensification is expected to lead to increased yields. Population growth leads to worsening resource conditions as cultivated and grazing area expands at the expense of forest, woodland, and other land uses. Population pressure also causes farmers to abandon conservation measures, such as terraces (particularly those that reduce cultivatable area), as well as encouraging cultivation on steeper and more fragile and marginal terrain, degradation of common property resources, over use of inputs, and other problems set in. Thus, the impacts of population growth on natural resources may either be positive or negative, depending on the people-natural resource interface.

D.4 Gender issues in relation to land management and utilisationD.4.a. Land Rights and the Marginalisation of Women

The plight of the peasant African rural woman can better be understood in the context of the continental crisis. Fundamental to the grasping of the situation of the African women is the fact that they directly shoulder the brunt of the social, economic and political crises that characterize the region. This is clearly manifest in terms of accessibility to production resources and education; division of labour and surplus income; decision making and governance, employment, to mention but a few. On the eve of colonialism, land in Uganda was held under customary tenure. Depending on the specific part of the country, customary holdings were either individual (i.e.) held by a single person, a family, or a particular lineage) or communal i.e. by a clan or tribe. As noted earlier, the introduction of mailo land and freehold systems, did not abolish the customary tenure. Following independence, the freehold system was maintained alongside crown land (now called 'pubic land'). In Buganda, customary rules of tenure allowed a peasant to lease portions of freehold ('bibanja') from landlords, and many Baganda and non-Baganda rural dwellers held land under customary holdings. The socio-cultural values peculiar to customary tenure persisted in spite of the statutory provisions passed in the post-independence era, e.g. the Public lands Act of 1969 and the Land Reform Decree of 1975.

Land holding in Uganda, which is primarily under customary tenure, sidelined women and continues to do so. This is because women's rights to land under the vast majority of customary land holding systems are largely limited to usufruct rights. On the other hand, land held under Mailo customary tenure is generally inherited by the customary heir of the deceased person ...almost invariably a male member of the family. The succession laws (the Act and the amendment decree) retained the main customary practices regarding land ownership, thus perpetrating the marginalisation of women. And yet women are key producers in the agricultural sector. Reduction of conflict between men and women entails addressing the condition of the marginalized women. The 1995 constitution attempts to address this problem in a variety of ways. The provision of Article 21, 31 and 33 in particular, sub-article 6 of article 33 stipulates that:

"Any laws, cultures, customs or traditions that are against the welfare, dignity of interest of women, are prohibited." (Republic of Uganda 1995)

It remains to be seen how this law translates into practice with respect to the elimination of such discriminatory practices, especially in light of article 237 (3), which retained customary tenure without modification. However, it is important to note that whereas Article 20 (3) of the 1967 constitution did not prohibit discrimination on the grounds of sex, article 21 (2) of the constitution of the republic of Uganda, 1995, prohibits discrimination on the grounds of sex.

Despite the seemingly insurmountable odds, there is reason to take heart. Globally, and more so in Africa, the gender question has been propelled to centre - stage. Since the 1975 United Nations International Women's Year Conference in Mexico and the declaration of the UN decade for women running up to 1985, academicians, politicians, researchers and policy makers have increasingly acknowledged the need to address the plight of the African Woman. Though much of what has come out of this quarter is no more than rhetoric, it has served the invaluable purpose of sensitising other sections of society including the women themselves.

In most of Africa now, local and international NGOs, some government and various women groups have picked the message and gone beyond the rhetoric through various forms of affirmative action. Some governments have opened up new opportunities for women in education and governance. Uganda has taken a vanguard role being appointing for the first time a woman Vice-President and elected a significant number of women to Parliament. Similarly, a sizeable number of women are on the cabinet. UN agencies like UNICEF have made vast contributions to the feminist cause in such sectors as health and education. Perhaps, the most interesting bit of it all is that even rural women are increasingly setting involved in mutually beneficial groups and civil associations. Although this has been done affirmatively like in the Uganda case, it has largely sown seeds of civic competence among women - an important ingredient in enhancing women's' right. Clearly the message is getting across. There are increasing manifestation of women crossing the erstwhile cultural boundaries by taking on things like trade, land ownership (mainly through purchase) formal employment, academia, real estate ownership, household headship, politics and governance.

But amidst the euphoria of the commendable progress in women emancipation, lurks the cultural impediment, which must not be under estimated. Already, there are signs that it has caused a stalemate between the prophets of doom and the forces of advancement. The former often invoke the "cultural wisdom" which clearly defines the place of a woman vis-à-vis her male counterpart. They have capitalized on deliberately re-defining the women's case as based on seeking "equality" rather than the noble objective of "equal opportunity" with a view to provoke popular sentiments against the women liberation movement. In a publication about the struggles of African women Obbo, (1990), it is noted that the weight of moral pressure, often backed by law is exerted on women in order to reverse or hinder possible changes in the power and authority relationships between men and women. That for instance, the few women who brave engaging in politics are reminded by hecklers and friends that their rightful place is not in governance. The snag that the domestic relations bill has met is a clear indication toward this. The legislators have conveniently shelved all issues relating too the bill until perhaps further notice...!

An understanding of gender issues and linkages among gender, poverty and the environment is fundamental to our comprehension of economic, social and environmental processes and changes. We are now recognising that especially rural poverty and food insufficiency are becoming increasingly feminised. The women's usurfuctory rights to resources on the commons are the most vulnerable of all (Fortmann and Bruce 1991:14). These rights may be invisible to projects and policy makers, implying a great risk that they are unintentionally being eliminated in effort to make land tenure regulations more formal and 'secure.' If women lose usurfuctory rights to, say, woodlands or water springs, access to the necessities of life for the entire family or household may be in peril of being removed. The main message that comes out of this section is about gender based disparity and unequal distribution of resources and power that is inherent in many cultures. These gender based disparities act as major hindrances to women's participation in developmental activities and create barriers for them to get the benefits of these efforts despite wide acceptance of the fact that nay assistance provided to women have far reaching impact in creating general wellbeing. While emphasising the need for mainstreaming gender concerns in national development planning, Sen (1992) pointed out that it would be a mistake to identify 'women

concerns' only with the well-being of women and that there is need to develop macro-models defining women's role in development.

In order to address gender issues effectively, it is important to involve women and women farmers in the preparation and implementation stages. Direct participation of all the stakeholders including women will help clarify ender roles and their implications in the project activities so as to facilitate gender integration into the project objectives.

E. CHALLENGES OF LAND USE CHANGE: THE QUESTION OF SUSTAINABILITY

E.1 Poverty and vulnerability

Poverty alleviation as a function of land utilisation is the central focus in this report. While the key issues like types of land tenure, historical changes in land ownership, legal transformations and the land market have been presented in the foregoing, we need to take a closer look at the question Poverty and it's implications to land utilisation and sustainable management. Caroline (1997) has conceptualised vulnerability as closely linked to resource endowment. The more one has, the less the vulnerability. Poverty and vulnerability are major issues in Uganda. This is because a significant proportion of the population (45%) lie under absolute poverty (MFPED 2001).

E.2. Legislation on land use: The Uganda experience

The major elements of policy, as stated by Sapru (1994), are the relationships among inputs, outputs, policy outcomes and measurable indicators. As reiterated by Lindbroom (1968), it is crucial for the policy process to identify the impediments to implementation so as to ensure efficiency and effectiveness.

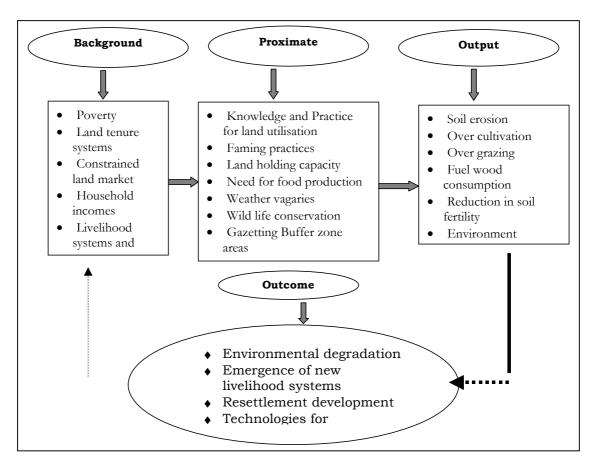
Some policy analysts, Dye (1975) conceptualise the policy process as a linkage among the political and environment forces. It is argued (Ibid.) that the interactive forces constituting political institutions, process and behaviour; environmental forces mainly composed of exogenous factors outside the system and the policy adopted as derivative of these forces determine the policy process. Gilbert and Specht's (1974) model of policy formulation focuses on the process approach, product approach and performance approach. The process approach is based on the dynamic socio-political variables as they determine the policy formulation. Important in this conceptualisation is the role of policy beneficiaries and other stakeholders in the policy process.

In the Ugandan context, right from pre-colonial times to date, land has been a major contentious issue that has not been addressed objectively the colonialists used it to entrench their rule and suppress resistance, while the post independence scenario saw major land reforms albeit not taking effect for fear of socio-political uprisings. Even to date the situation has largely remained the same. Our case has been land legislation being a bye bye-product of land use; in anecdotal sense it had to keep this way. The result has been a legacy of multiple land use scenarios (mailo, freehold, public land and leasehold tenure systems) that make it even harder to entrench a land use policy.

It should also be re-iterated that land constitutes the only resource that most households can fall back to as the means of livelihood. In the case of land utilisation and ownership, it is critical that appropriate policies are developed if the government is to tackle the problem of poverty. As regards land ownership in Uganda, there are key legal and political questions, which brush closely with the issue of agricultural productivity and sustainable land utilisation. The cases of Buganda where Sango bay is located, Ntungamo are examples that make land ownership unique. The nature of land utilisation in these areas leads to intriguing questions for investigating the causes of poverty and vulnerability to land degradation in these areas. The understanding of poverty and vulnerability can be best explained by land management

and utilisation. There are tremendous challenges encountered by various population sectors in the accessing and utilising land for various purposes. The challenges are mainly based on both natural and man-made factors as well as internal and exogenous factors. In order to provide a critical analysis of the contribution of different factors to sustainable land utilisation in the area of study, a system analysis model is presented in Figure 10.

Figure 10. Systems Analysis Model Indicating the Various Challenges for Land Use Change and its Implications for Sustainability of Land Resources



The model is divided into four components: background, proximate, output, and outcome. The model shows that most of the activities undertaken by the local populace in search of survival have in many ways culminated into calamitous consequences of degradation. Environmental degradation is linked to poverty where low resource endowment forces the poor to encroach on natural resources unwisely, besides environmental conservation is costly and needs heavy investment. The poor therefore resort to short-term benefits such as deforestation. Therefore there is a need to emphasise improvement of household welfare/income in any activities undertaken to conserve the environment.

E.3. Regional Impacts: Refugees and Internally Displaced Persons

The modern history of refugees in Uganda dates back into the Second World War (1938-1945) when European refugees from countries such as Poland were settled in Nyabyeya in Masindi district and Koja in Mubende district (G. Pincywa, 1994). Uganda was later subjected to yet another influx of refugees from Kenya during the Mau-Mau uprising in the 1960s. Many of these were settled in Kigumba in current Hoima district. The Anyanya rebellion in Sudan in the 1960s and early 70s coupled with the current Sudanese People's Liberation Army (SPLA) war against the Khartoum Government have also made massive contributions to the influx of refugees in Uganda. In 1959, Uganda received another group of

Tutsis refugees from Rwanda. These were fleeing the violence unleashed by the Hutu who had overthrown the Tutsi dominated regime.

While it is a commendable gesture to offer asylum to helpless refugees, apparently little has been done to check the evident consequences of refugee settlements on natural resource utilisation and management in the recipient countries. The impact of refugee numbers, their socio-economic activities and means of livelihoods have great impact on land degradation in the host areas. It has for instance been estimated that in 1959 alone, about one hundred and twenty thousand (120,000) refugees from Rwanda migrated to Uganda (Robert Stock 1995). The majority of these were settled in Orukinga and Nakivale settlements both in Mbarara district. Other immigrants have come from the neighbouring districts of Bushenyi and Kabale while others came form as far as Tanzania. While food, shelter, water and health care often dominate the agenda subsequent to refugee influx, the one critical aspect that is overlooked is natural resource (land) degradation. This mainly stems from the inevitably increased population density, the resultant overuse of marginal areas and poor land practices.

E.4. Community Response to Land Degradation

There is evident lack of organised response to the problem of land degradation. Efforts to conserve the environment and natural resources in the study area seem to have been fruitless. Most of the past and current projects in the area have been unsuccessful. People do not participate in these projects due to low commitment and enthusiasm. The Local Councils in Ngarama Sub-County Mbarara district, reiterated that:

"Tree planting, mulching in plantations and sensitisation of community members have been attempted through the local Council structures, but there is little enthusiasm among community members. So, there has been minimal impact of these methods to land conservation."

In the meantime, over cultivation, overgrazing, soil depletion, deforestation, declining yields and bush burning continue unabated. The single most serious factor discovered is the low level of environmental consciousness among the population, both refugee and indigenous. When asked about the major causes of very low enthusiasm for natural resource conservation activities in the area, the Local Council officials asserted that; the major problem has been lack of a perception of sustainable land utilisation. This implies that the government together with NGOs ought to join hands with local communities to support the few efforts that are emerging. For instance there is need to educate the local people for effective use of natural resources. There is need to inculcate in them the virtues of sustainable natural resource utilisation. As the Chinese old adage stipulates:

"The land we have now has not been inherited from our forefathers but has been borrowed from our grand children."

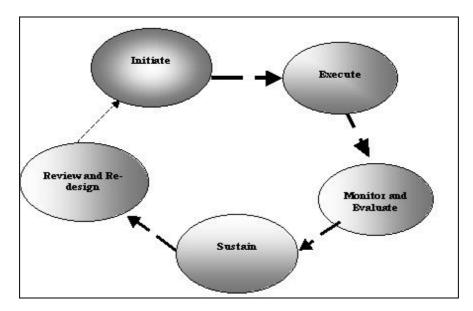
This implies crucial aspect of sustainable utilisation of land resources if the land is to provide livelihood to future generations.

F. TOWARD THE DEVELOPMENT OF A SUSTAINABLE LAND USE POLICY

The model to be adopted will be the adoptive Planning model. This is based on the principle of 'all-inclusive and all-participating'. It is based on the concepts of local initiative and sustenance. The model is indicated in Figure 11. It is envisaged to yield best practices for participatory planning and implementation for developing interventions at the local levels. The major tenets here are the merits of local ownership, involvement and participation in the activities that focus on sustainable land use. The policy framework operates at tree levels:

- a) Enabling Level
- b) Intervention level
- c) Beneficiary level.

Figure 11. Adoptive Planning Model For Developing a Land Use Policy for Sustainable Land Utilisation



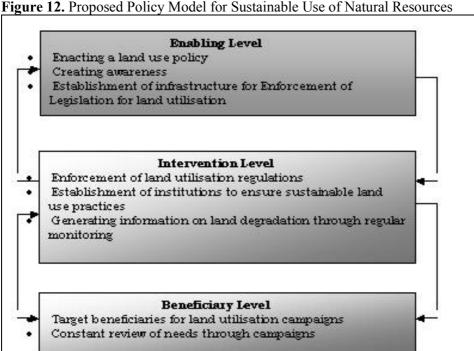
Enabling Level-This will comprise the provision of a conducive environment which can facilitate the population to sustainably use land resources in the area. It comprises the enactment of a land use policy, legislation, tenure regimes and utilisation levels.

Intervention Level-This level comprises the institutions put in place to ensure compliance to the laws and regulations for natural resource management. Such institutions include NEMA, and the Department of Forestry, Agriculture and Animal Industry. This will evaluate the human capital base, the co-ordination mechanisms and interface with both the local households as well as the civil society organisation. This will also assess the capacity for monitoring and evaluation of various activities in the area, setting of indicators and reviews. This level will also establish the MIS to include: information generation, institutional conduits for information flow, and the feedback process. The performance of these institutions will determine the degree of compliance to the legislative framework for sustainable use of natural resources in Uganda.

Beneficiary Level-The beneficiaries are the real consumers of the various interventions. These are the ultimate barometers of success. The socio-economic status of targeted beneficiaries, which is an indicative value of community capacity, need to be assessed. This will derive the understanding of the context of assistance. Similarly, this level will investigate the unit of participation and support. The crucial question here is; should the unit of participation and support be a household, groups i.e. (GRO, CBOs) or the community as a whole? The Exhibit bellow indicates the policy model

In the circumstances, a number of proposals based on the analysis of available data as well as local people' view and directed at sustainable land management are proposed. They include the following:

- Enactment of a land use policy
- Encouraging the population to acquire land legally so as to avoid encroachment and misuse. This implies the strengthening of private tenure management of land.
- Local councils can play a big role ensuring the proper use of land. This can be through enactment of byelaws.



- In cases of refugee influx, the government should consider the gazetting of some portions of public land for refugees and develop integrated programmes that include natural resource conservation.
- For purposes of environmental protection, some public land tracts can be gazetted as critical bio-diversity zones. Local councils could be appropriate institutions to do this as peoples effective watchdogs.
- Anti-grass burning campaigns. These should be stepped up. Local byelaws should be enacted to discourage the practice. Local councils and community members should enforce the byelaws.
- Extension with emphasis on crop and animal husbandry practices need to be brought nearer to the people. The advantages of intensive farming should be disseminated. Encouraging cross breeding between the local breeds and the exotic cattle can do this. The advantages here will be two fold: a) few herds and less overgrazing, b) high milk production per head of cattle. The district agricultural office CBOs, NGOs and donor communities should help in this endeavour.
- Land cover enhancement activities. The area is bare. Tree planting needs to be integrated in the wider community practices. There is also need to practice agroforestry.
- Steps should be taken to encourage sedentary farming practices but not the type of searching for grazing areas. This can be done through encouraging the cross breeding of indigenous with exotic breeds.

G. CONCLUSIONS, LESSONS AND EMERGING ISSUES

G.1. Conclusions and Lessons

- 1. Land use change is intricately associated with policy, dynamic values and perception of land users as well as exogenous factors such as demand and supply issues in global market systems.
- 2. Knowledge of different implications of and use practices is critical for natural resource utilisation
- 3. Exogenous factors such as refugee influx seriously influence land utilisation
- 4. The commonly held notion that land degradation occurs as a direct result of demographic pressure is an over simplification of what is actually a very complex relationship. The simplicity of the logic is enticing, but is equally incomplete.
- 5. Security of tenure is a prerequisite to long-term investment in soil productivity, regardless of whether ownership is in individual or collective hands.
- 6. As farm size shrinks, holdings become more fragmented, not in the number of parcels operated but in the distance between parcels. The cultivation of more distant fields usually reduces farmer investments. In some cases, fragmentation means greater agro ecological diversity, a condition that helps insure farmer against the risk of total crop failure.
- 7. Unless farmers can expect an economic return equal to their level of investment, there will be little incentive for them to adopt such practices. We cannot assume that conservation technologies will be attractive to farmers simply because they protect the resource base.
- 8. The subdivision and consolidation of landholdings (e.g. land reform), absentee landholding, and use of fragile lands are all part of the structure of landholding. These are emotional issues and are subject to change in government policy. The kinds of incentives and sanctions surrounding the structure of landholding are factors that can change it. Because of socio- cultural, agro-climatic and historical uniqueness, these factors differ vastly from one place to another.

There is inevitable interface between poverty and environment. In UNCED in Rio, 178 countries were represented, more than 100 heads of state attended, more than 1,000 NGOs participated. World leaders signed five major instruments, one of them being Agenda 21, a document identifying priority actions and guidelines. Chapter 28 of this document is also referred to as 'Local Agenda 21'. It calls for individual governments to enact efforts for sustainable management of the environment. So what does all this mean to us? This stance means that we are well on the right course once we call upon our local leaders to be part of the environmental campaign for sustained eco-balance. Therefore, in the spirit of Local Agenda 21, the planning process should build on national action plans within the Agenda 21 framework. In this context, environmental management should not be caring for the environment for its own sake but for its usefulness to humans, and quality of life for all. Our desire today is to see a balance between the conflicting demands of the natural environment, social equity, human well being and economic development.

The local governments in the area of study were found to play a key role in developing and implementing action on sustainable development. They oversee planning processes, development control establish local environment policies and regulations, and assist in the implementation of national and regional environmental policies. Furthermore, local governments play a vital role in educating, mobilizing and responding to the public in order to promote sustainable development. In Uganda, the local government Act (1997) and the Local urban Authorities' Act (1969) empower Municipal and Local Urban Authorities to regulate

and over see all the development including environment management in their jurisdiction. With global partnerships and pragmatic management policies, Local Governments ought to enforce sound management and settlement practices that should not allow environmental degradation with impunity. However, in the face of pervasive poverty, this is easy said than done.

G.2 Key Emerging Issues

- 1. Population dynamics affect land use changes both positively and negatively. In the former case, land pressure triggers innovations in land management. A case in point is soil fertility improvement through manure. In the latter case, the pressure on natural resources as a result of demand factors triggers land degradation e.g. overgrazing and bush burning.
- 2. Poverty alleviation is intricately associated with land management and Utilisation is the central focus of this paper. While the key issues like types of land tenure affect land use, has got strong bearing on land use and subsequent level of sustainability of the land resources.
- 3. Land Utilization and Productivity. The overriding view in current policy analysis is that the present systems of land management in Uganda are counter productive. The land policy framework focuses on land tenure but not utilization. This has tended to result into over utilization, which has led to serious degradation.
- 4. Rationalising Land Management and Administration. The above is the flow of the current policy. The author largely agrees with the reasoning that in order to alleviate poverty in Uganda, there is need to rationalise the land tenure management and Administration. Land is the most precious asset the country can boast of. The country is blessed with favourable climate and fertile soils both of which have contributed to make it suitable for several land use type including agriculture, forestry and livestock management. However, the tenure and management regimes have condemned Agriculture to a dominant subsistence level. Even some who own large piece of land find that they cannot get loans for investment due to lack of titles. The majority peasants have their land fragmented and hence necessitating consolidation prior to the titling process, and yet this process is both expensive and prohibitive to most peasants. New investors also find it difficult to acquire land. It is envisaged that the removal of encumbrances in the land tenure systems will promote investment and the windfalls trickle down to the people. Even at individual level, it is hoped that the unencumbered rights to land will promote the propensity to develop it hence development. The above posits to one issue; that there is low investment in land management. A situation that continues to undermine sustainable development.
- 5. Changing Land Tenure Regimes. The above are some of the key issues at the centre of the land debate. What is interesting is that there is widespread consensus on the need to change the land tenure and management system in order to alleviate poverty and achieve sustainable land utilisation the tone of contention is on what exact changes and provisions should be made. And often, the side taken by the protagonists depend on how favourable the changes are to one's side. This is where the political and legal balancing comes in.
- 6. Equity. In the final analysis, it must emerge that the proposed changes will go a long way to meet national aspirations. They are potent weapons against the prevailing poverty in Uganda. They will help promote investment, modernisation and development. However, it would be desirable to incorporate a few more provisions for the vulnerable groups so that the fruits trickle down to all. Such provisions should include subsidized survey of customary land, protection of communal rights to pastoral land and more incentives to bonafide tenants. According to Liz Wily (1997), there

should also be more protection from the state and rich individuals. The state should not be allowed to acquire land at will and at its own terms without guiding provisions. The law providing for land utilisation should be enacted to avoid frivolous usage of land. It is the submission of the author that with above, the proposed land management system in Uganda can be a major force for poverty alleviation in the years to come. A lot of water has already flowed under the bridge and if this is realised, the people will have the last laugh.

7. Land Tenure and Economic Growth. Evolving a sustainable economic growth with secure, safe and affordable legal framework to land access for the poor as a factor in poverty reduction. Tackling the legal, institutional and social issues which prevent the poor gaining access to assets such as land. This requires an effort to eliminate discriminatory and corrupt practice, reforming dysfunctional and administrative systems and ensuing the rule of the law in relation to land.

Poor people's access to land is important in ensuring that they can contribute to and benefit from economic growth. Poverty elimination requires improved access to critical productive assets such as land albeit on a sustainable basis, this is where conservation comes in. economic evidence indicates that equitable distribution of assets, including land, can promote higher rates of productivity and growth than are found in countries in which inequality is marked. Secure rights to land underpin secure livelihoods and shelter by reducing households' vulnerability to shocks, guaranteeing a level of self-provisioning and supplementary incomes from basic food stuffs and enabling easier access to basic infrastructure, employment markets and financial services. Since Land policy underpins development, pro-poor police together with planning and regulatory reform, can reduce the costs to the poor of securing livelihood and shelter.

The general pattern of agricultural development was closely linked to land tenure and conservation. Poverty seemed a cross cutting issue in environmental conservation. In general, the impacts of population growth were neither as grim as Malthusian pessimists often argue nor as positive as Boserupian optimists anticipate. There is significant anecdotal evidence that large areas of land, held under mailo and leasehold tenure, are not being farmed at all. There is in other words significant national imbalances between land capacity and land utilisation. Extensive areas of land suitable for agriculture are not being used for productive purposes. Other areas less suitable for agriculture and susceptible to degradation, including forest reserves, parks, swamplands and other fragile areas are under severe pressure from encroachment. The result is that agriculture is not making as great a contribution to national wealth, and to the generation of income and employment, that it is capable of making.

Constraints are principally institutional and economic in nature. Certain tenure arrangements and rules may not provide sufficient inducements or economic incentives for optimum utilisation. Large holdings may be under utilised because of diseconomies of scale. Customary tenures, based upon group or ethnic rights, may limit the ability of persons coming from areas of land shortage to move to areas of land surplus. Land markets may not function efficiently, or where not sanctioned by law, as in customary areas, may not function openly. There are a variety of policy options available to help correct these problems. Including tenure reforms, development requirements in leases, and land taxation. Each of these has their own potential costs and benefits. Many but not all, of these issues need to be addressed urgently.

H. BIBLIOGRAPHY

- Blumberg, Rae Lesser (1989) Making The Case For The Gender Variable: Women And The Wealth And The Well-Being Of Nations, *Women In Development Technical Reports In Gender And Development* No. 1.USAID Washington DC, UNCPD.
- Campbell D, Gichohi H. et al (2000) Land use conflict in Kajiado District, Kenya, Geography and African Studies, Michigan State University USA.
- Clay D, Guizlo M and Wallace S. (1994) Population and Land Degradation; Michigan Sate University, USA.
- FAO (1990): Gender Issues In Rural Food Security In Developing Countries. *Women In Agricultural Development Series* FAO, Rome, Italy.
- Jagger P and Pander J (2001) Policies For Improved Land Management In Uganda, *EPTD Workshop Summary Paper* No. 10.
- Kamugisha J 1993, the study of water for livestock and domestic use and related socioeconomic activities and environmental issues in L.Mburo National Park and Environs. SIDA, Nairobi
- Karugire et al 1971, Evolution of Management policies and Practices, legal status and Administration in L.Mburo area
- _____. 1971 A history of Ankole Kingdom in western Uganda,
- Kasoma P.& Kamugisha J 1993 Live stock in lake Mburo National Park
- Kisamba Mugerwa W.1991. Range land tenure and resource Management: An over view of Pastoralism in Uganda. Kampala.
- Lind J and Cappon J (2001) Realities or Rhetoric; revisiting the decentralisation of Natural Resources Management in Uganda and Zambia, ACTS press Nairobi Kenya
- Ministry of Finance and Economic Planning (1998), Background to Budget
- Ministry of Lands, Housing and Physical Planning (1997), *National shelter Strategy*, *Entebbe*.
- Nsibambi (1997) Decen*tralisation as an Instrument of Poverty Alleviation*, Makerere Institute of Social Research
- ______. (1996) *Land Tenure relations in Uganda (1900-1995)*, Makerere Institute of Social Research, Kampala
- Nuwagaba (1998), *involuntary Resettlement and Natural Resource utilisation*, Makerere Institute of Social Research
- _____. (1998), land management as an instrument of poverty alleviation: The case of Uganda, Makerere University, Kampala
- _____. (2002) Political Economy of Land management regimes in Uganda: The evolution of the Kibaale Question, Makerere University Kampala
- Pander j Et al (2001), *Development pathways and land management in Uganda: Causes and Implications*, EPTD Discussions Paper No. 85
- Republic of Uganda (1997) Background to Budget, Kampala
- _____(1998), *The Land Act*, Kampala
- _____(1975) Land Reform decree (1995); The Ugandan Constitution
- Robert Stock (1995) Africa South of the Sahara, University of Toronto Press
- World Bank (1998), Gender Issues in Ethiopia: Implementing the National Policy on Women. Africa Region, findings No. 119, World Bank, Washington DC